

of Transportation

Research and Special Programs Administration

MAR - 3 2000

Mr. Ned Meister
Director, Commodity and
Regulatory Activities
Texas Farm Bureau
P.O. Box 2689
Waco, Texas 76702-3030

Ref. No: 99-0228

400 Seventh Street, S.W.

Washington, D.C. 20590

Dear Mr. Meister:

This is in response to your letter, and subsequent telephone conversation with Diane LaValle, of my staff, requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). I apologize for the delay in response.

Your questions are answered as follows:

- Q1. Are nurse tanks with a capacity of 3000 gallons or less that meet construction specifications required at the time of manufacture authorized for the transportation of anhydrous ammonia?
- A. As provided by § 173.315(m) a nurse tank transporting anhydrous ammonia, operated by a private carrier exclusively for agricultural purposes does not have to meet the specification requirements of 49 CFR Part 178 if, among other criteria, it meets the requirements of the ASME code in effect at the time it was manufactured.
- Q2. As provided by § 173.315(m)(5), a nurse tank transporting anhydrous ammonia may be loaded to a filling density no greater than 56 percent. Using the water weight factor of 8.32828 pounds per gallon, would a 3000 gallon tank loaded to 56% by weight have a maximum loaded weight of 13,991.51? [3000 X 8.32828 X 56%]
- A. The maximum weight of anhydrous ammonia authorized in this cargo tank is 13,991 pounds which does not include the weight of the cargo tank and motor vehicle.
- Q3. There is a difference in the maximum permitted filling densities in § 173.315(a) and § 173.304. Please explain the difference.
- A. Section 173.315 pertains to cargo tanks, whereas § 173.304 pertains to cylinders.



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13.315

Q4. What are the requirements of the Compressed Gas Association's (CGA) pamphlet S1.2?

A. Pamphlet S1.2 may be purchased from the CGA. They may be contacted at (703) 412-0900.

I hope this information is helpful.

Sincerely,

Delmer F. Billings

Chief, Standards Development

Office of Hazardous Materials Standards



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August 9, 1999

Edward T. Mazzullo, Director Office of Standards Research and Special Programs Administration U.S. Department of Transportation 400 Seventh Street, S.W. Washington, DC 20590

Dear Mr. Mazzullo:

Texas farmers are concerned that state and federal agencies have a difference in the interpretation of regulations effecting anhydrous ammonia "nurse tanks" as a result of the HM 200 program. While some of the differences have been resolved, the following issues relating to anhydrous ammonia nurse tanks with a capacity of 3000 gallons or less are still unclear.

**Tank Specifications** - Please verify that anhydrous ammonia nurse tanks with a capacity of 3000 gallons or less that meet construction specifications required at time of manufacture are compliant.

Filling Density - A nurse tank can be loaded to a filling density no greater than 56 percent [173.315 (m)(5)]. The table in 173.315 (a) lists the maximum permitted filling density at 56 percent by weight and 82 percent by volume. Using the water weight factor of 8.32828 pounds per gallon (173.315 Note 1), would a 3000 gallon tank loaded to 56 percent by weight have a maximum loaded weight of 13,991.51 pounds (3000 X 8.32828 X 56%)?

Are the volume gauging devices correlated to the to the weight filling density? There is a difference in maximum permitted filling densities in the table in 173.315 (a) (56%) and the table in 173.304 (54%). Please explain the difference.

Charging cylinders

Safety Relief Valves - Nurse tanks are to be equipped with safety relief valves that meet the requirements of CGA pamphlet S1.2 [173.315 (m)(2)]. What are these requirements?

Financial Responsibility - What are the minimum levels of financial responsibility for the following scenarios (common farm truck and nurse tank combinations):

- 1. Farm truck pulling a single nurse tank intrastate from supplier to farm?
- 2. Farm truck pulling two nurse tanks intrastate from supplier to farm?
- 3. Farm truck pulling a single nurse tank intrastate from farm to farm?
- 4. Farm truck pulling two nurse tanks intrastate from farm to farm?
- 5. Would the minimum levels of financial responsibility in the above four scenarios change if the nurse tanks were moved interstate?



- 6. What is the financial responsibility of a supplier who delivers anhydrous ammonia in a nurse tank intrastate to the farm?
- 7. What is the financial responsibility of a supplier who makes that delivery interstate?

## Part 172 Requirements

# Subpart C - Shipping Papers

Not required [173.315 (m)(7)].

1. Does this exception apply to nurse tanks moved interstate?

## Subpart D - Marking

- 1. What are the marking requirements for nurse tanks used to transport anhydrous ammonia in a nurse tank?
- 2. Is there an illustration that shows proper placement and content of the required markings?

### Subpart E - Labeling

- 1. Is there additional labeling required for nurse tanks if the tank is properly placarded?
- 2. If so, is there an illustration that shows the proper placement and content of the additional labels?

### Subpart F - Placarding

- 1. Please describe the placards required for nurse tanks by content and placement.
- 2. Is there an illustration that shows the proper placement and content of required placards?

## Subpart G - Emergency Response Information

Not required if shipping papers are not required [172.600 (d)]. Shipping papers are not required for nurse tanks under 173.315 (m)(7).

#### Subpart H - Training

1. Are farmers who use anhydrous ammonia nurse tanks required to provide training to employees under 172.704?

#### Other Issues in need of Clarification

#### Mileage Limitation

- 1. Are all exemptions and exceptions limited to the intrastate transportation of anhydrous ammonia nurse tanks within a 150 mile radius of the farm?
- 2. Is the 150 mile radius rule applicable to transporting anhydrous ammonia nurse tanks interstate from farm to farm? Interstate from supplier to farm.
- 3. Is the 150 mile radius rule applicable to suppliers transporting anhydrous ammonia nurse tanks intrastate from their place of business to the farm? Interstate?

#### Commercial Drivers License

- 1. Is a farmer or his employee required to hold a CDL to transport an anhydrous ammonia nurse tank intrastate from farm to farm? From supplier to farm?
- 2. Is a farmer or his employee required to hold a CDL to transport an anhydrous ammonia nurse tank interstate from farm to farm? From supplier to farm?

#### Hours of Service

1. Is there an hours of service standard that must be met by a farmer or his employee when engaged in normal farming activities that include transporting anhydrous ammonia nurse tanks intrastate from farm to farm? From supplier to farm? If the nurse tank is transported interstate from farm to farm? Transported interstate from supplier to farm?

#### Vehicle Maintenance

Are farm trucks used to transport anhydrous ammonia nurse tanks intrastate subject to DOT inspections? Are they subject to DOT inspection if they are used interstate?

## Drug and Alcohol Testing

Are farmers or their employees subject to drug and alcohol testing requirements if transporting anhydrous ammonia nurse tanks?

### **Driver Qualifications**

Are there federal driver qualifications required for a farmer or his employee when transporting anhydrous ammonia nurse tanks when engaged in normal farming activities?

Thank you for clarifying these important issues. It is our goal to assist farmers in Texas to be compliant when transporting anhydrous ammonia nurse tanks.

Sincerely,

Ned Meister, Director

Commodity and Regulatory Activities